

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Ma, et al.

Serial No.: 10/784,904

Confirmation No.: Unknown

Filed: February 23, 2004

For: Gate Electrode Dopant
Activation Method for
Semiconductor
Manufacturing

~~~~~

## Group Art Unit: Unknown

**Examiner:** Unknown

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Dear Sir:**

**CERTIFICATE OF MAILING**  
**37 CFR 1.8**

I hereby certify that this correspondence is being deposited on March 31, 2004 with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450. 1

Date 3/31/04

Signature

## INFORMATION DISCLOSURE STATEMENT

The Applicants, and the Attorney who signs below on the basis of the information supplied by the inventor and the information in his file, submit herewith patents, publications, or other information of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

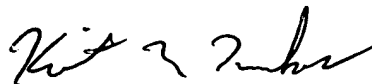
While the information submitted in this Information Disclosure Statement may be material pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication, or other information referred to therein is prior art for this invention unless specifically designated as such.

In accordance with 37 CFR § 1.97, this Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined under 37 CFR § 1.56(a) exists.

The patents and/or publications submitted herewith are set forth on the attached Form PTO-1449.

If the sum of \$180.00 is due under 37 CFR § 1.17(p) pursuant to § 1.97, the Commissioner is hereby authorized to charge this fee, and any other fee necessary to make this submission timely, to the Deposit Account No. 20-0782/APPM/8830/KMT.

Respectfully submitted,



---

Keith M. Tackett  
Registration No. 32,008  
MOSER, PATTERSON & SHERIDAN, L.L.P.  
3040 Post Oak Blvd. Suite 1500  
Houston, TX 77056  
Telephone: (713) 623-4844  
Facsimile: (713) 623-4846  
Attorney for Applicant(s)



Substitute for form 1449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1

of

5

Application Number

10/784,904

Filing Date

February 23, 2004

First Named Inventor

Ma, et al.

Group Art Unit

Unknown

Examiner Name

Unknown

Attorney Docket Number

AMAT/8830/FEP/PCVD/PJS

Submission Date

March 31, 2004

## U.S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |                                                    |                                                                                 |
|                    | A1                    | US-6645838                               | 11/11/2003                     | Talwar, et al.                                     |                                                                                 |
|                    | A2                    | US-6635588                               | 10/21/2003                     | Hawryluk, et al.                                   |                                                                                 |
|                    | A3                    | US-6559520                               | 05/06/2003                     | Matsuki, et al.                                    |                                                                                 |
|                    | A4                    | US-6544900                               | 04/08/2003                     | Raaijmakers, et al.                                |                                                                                 |
|                    | A5                    | US-6458718                               | 10/01/2002                     | Todd                                               |                                                                                 |
|                    | A6                    | US-6410463                               | 06/25/2002                     | Matsuki                                            |                                                                                 |
|                    | A7                    | US-6387761                               | 05/14/2002                     | Shih, et al.                                       |                                                                                 |
|                    | A8                    | US-6383956                               | 05/07/2002                     | Hawryluk, et al.                                   |                                                                                 |
|                    | A9                    | US-6383955                               | 05/07/2002                     | Matsuki, et al.                                    |                                                                                 |
|                    | A10                   | US-6358829                               | 03/19/2002                     | Yoon, et al.                                       |                                                                                 |
|                    | A11                   | US-6352945                               | 03/05/2002                     | Matsuki, et al.                                    |                                                                                 |
|                    | A12                   | US-6348420                               | 02/19/2002                     | Raaijmakers, et al.                                |                                                                                 |
|                    | A13                   | US-6303476                               | 10/16/2001                     | Hawryluk, et al.                                   |                                                                                 |
|                    | A14                   | US-6284686                               | 09/04/2001                     | Marlor                                             |                                                                                 |
|                    | A15                   | US-6232196                               | 05/15/2001                     | Raaijmakers, et al.                                |                                                                                 |
|                    | A16                   | US-6025627                               | 02/15/2000                     | Forbes, et al.                                     |                                                                                 |
|                    | A17                   | US-5908307                               | 06/01/1999                     | Talwar, et al.                                     |                                                                                 |
|                    | A18                   | US-5807792                               | 09/15/1998                     | Ilg, et al.                                        |                                                                                 |

## FOREIGN PATENT DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document                                                           | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages or<br>Relevant Figures Appear | T <sup>6</sup> |
|--------------------|-----------------------|-----------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|----------------|
|                    |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                |                                                    |                                                                                 |                |
|                    | B1                    | WO 02/097864                                                                      | 12/05/2002                     | ASM America, Inc.                                  |                                                                                 |                |
|                    | B2                    | WO 02/080244                                                                      | 10/10/2002                     | ASM America, Inc.                                  |                                                                                 |                |
|                    | B3                    | WO 02/065525                                                                      | 08/22/0002                     | ASM America, Inc.                                  |                                                                                 |                |
|                    | B4                    | WO 02/065517                                                                      | 08/22/2002                     | ASM America, Inc.                                  |                                                                                 |                |
|                    | B5                    | WO 02/065516                                                                      | 08/22/2002                     | ASM America, Inc.                                  |                                                                                 |                |

Examiner

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2

of

5

Application Number

10/784,904

Filing Date

February 23, 2004

First Named Inventor

Ma, et al.

Group Art Unit

Unknown

Examiner Name

Unknown

Attorney Docket Number

AMAT/8830/FEP/PCVD/PJS

Submission Date

March 31, 2004

**U.S. PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |                                                    |                                                                                 |
|                    | A19                   | US-5796116                               | 08/18/1998                     | Nakata, et al.                                     |                                                                                 |
|                    | A20                   | US-5693139                               | 12/02/1997                     | Nishizawa, et al.                                  |                                                                                 |
|                    | A21                   | US-5674304                               | 10/07/1997                     | Fukada, et al.                                     |                                                                                 |
|                    | A22                   | US-5527733                               | 06/18/1996                     | Nishizawa, et al.                                  |                                                                                 |
|                    | A23                   | US-5480818                               | 01/02/1996                     | Matsumoto, et al.                                  |                                                                                 |
|                    | A24                   | US-5469806                               | 11/28/1995                     | Mochizuki, et al.                                  |                                                                                 |
|                    | A25                   | US-5374570                               | 12/20/1994                     | Nasu, et al.                                       |                                                                                 |
|                    | A26                   | US-5372860                               | 12/13/1994                     | Fehlner, et al.                                    |                                                                                 |
|                    | A27                   | US-5294286                               | 03/15/1994                     | Nishizawa, et al.                                  |                                                                                 |
|                    | A28                   | US-4834831                               | 05/30/1989                     | Nishizawa, et al.                                  |                                                                                 |
|                    | A29                   | US-20030082300                           | 05/01/2003                     | Todd, et al.                                       |                                                                                 |
|                    | A30                   | US-20030045074                           | 03/06/2003                     | Seibel, et al.                                     |                                                                                 |
|                    | A31                   | US-20030036268                           | 02/20/2003                     | Brabant, et al.                                    |                                                                                 |
|                    | A32                   | US-20030022528                           | 01/30/2003                     | Todd                                               |                                                                                 |
|                    | A33                   | US-20020197831                           | 12/26/2002                     | Todd, et al.                                       |                                                                                 |
|                    | A34                   | US-20020173130                           | 11/21/2002                     | Pomerode, et al.                                   |                                                                                 |
|                    | A35                   | US-20020173113                           | 11/21/2002                     | Todd                                               |                                                                                 |
|                    | A36                   | US-20020168868                           | 11/14/2002                     | Todd                                               |                                                                                 |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document                                                           | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages or<br>Relevant Figures Appear | T <sup>6</sup> |
|--------------------|-----------------------|-----------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|----------------|
|                    |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                |                                                    |                                                                                 |                |
|                    | B6                    | WO 02/065508                                                                      | 08/22/2002                     | ASM America, Inc.                                  |                                                                                 |                |
|                    | B7                    | WO 02/064853                                                                      | 08/22/2002                     | ASM America, Inc.                                  |                                                                                 |                |
|                    | B8                    | WO 01/41544                                                                       | 06/14/2001                     | ASM America, Inc.                                  |                                                                                 |                |
|                    | B9                    | WO 98/20524                                                                       | 05/14/1998                     | Pacific Solar Pty.<br>Limited                      |                                                                                 |                |
|                    | B10                   | JP 63-062313 (Abstract Only)                                                      | 03/18/1988                     | Fujitsu, Ltd.                                      |                                                                                 |                |

Examiner

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

APR 05 2004 (Use as many sheets as necessary)

Sheet 1 of 5

of

5

|                        |                        |
|------------------------|------------------------|
| Application Number     | 10/784,904             |
| Filing Date            | February 23, 2004      |
| First Named Inventor   | Ma, et al.             |
| Group Art Unit         | Unknown                |
| Examiner Name          | Unknown                |
| Attorney Docket Number | AMAT/8830/FEP/PCVD/PJS |
| Submission Date        | March 31, 2004         |

**U.S. PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |                                                    |                                                                                 |
|                    | A37                   | US-20020093042                           | 07/18/2002                     | Oh, et al.                                         |                                                                                 |
|                    | A38                   | US-20020022294                           | 02/21/2002                     | Hawryluk, et al.                                   |                                                                                 |
|                    | A39                   | US-20020019148                           | 02/14/2002                     | Hawryluk, et al.                                   |                                                                                 |
|                    | A40                   | US-20010055672                           | 12/27/2001                     | Todd                                               |                                                                                 |
|                    | A41                   | US-20010046567                           | 11/29/2001                     | Matsuki, et al.                                    |                                                                                 |
|                    | A42                   | US-20010024871                           | 09/27/2001                     | Yagi                                               |                                                                                 |
|                    | A43                   | US-20010020712                           | 09/13/2001                     | Raaijmakers, et al.                                |                                                                                 |
|                    | A44                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A45                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A46                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A47                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A48                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A49                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A50                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A51                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A52                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A53                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A54                   | US-                                      |                                |                                                    |                                                                                 |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document                                                           | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages or<br>Relevant Figures Appear | T <sup>6</sup> |
|--------------------|-----------------------|-----------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|----------------|
|                    |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                |                                                    |                                                                                 |                |
|                    | B11                   | JP 62-171999 (Abstract Only)                                                      | 07/28/1987                     | Nippon Telegr & Teleph Corp.                       |                                                                                 |                |
|                    | B12                   | JP 58-098917 (Abstract Only)                                                      | 06/10/1983                     | Matsushita Denki Sangyo KK                         |                                                                                 |                |
|                    | B13                   | JP 2001-189312 (Abstract Only)                                                    | 05/02/2001                     | Motorola, Inc.                                     |                                                                                 |                |
|                    | B14                   | JP 2001-111000                                                                    | 04/20/2001                     |                                                    |                                                                                 |                |
|                    | B15                   | JP 05-102189 (Abstract Only)                                                      | 04/23/1993                     | Fujitsu, Ltd.                                      |                                                                                 |                |

Examiner

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 4

of

5

Application Number

10/784,904

Filing Date

February 23, 2004

First Named Inventor

Ma, et al.

Group Art Unit

Unknown

Examiner Name

Unknown

Attorney Docket Number

AMAT/8830/FEP/PCVD/PJS

Submission Date

March 31, 2004

## U.S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |                                                    |                                                                                 |
|                    | A55                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A56                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A57                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A58                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A59                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A60                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A61                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A62                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A63                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A64                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A65                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A66                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A67                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A68                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A69                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A70                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A71                   | US-                                      |                                |                                                    |                                                                                 |
|                    | A72                   | US-                                      |                                |                                                    |                                                                                 |

A73

## FOREIGN PATENT DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document                                                           | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages or<br>Relevant Figures Appear | T <sup>6</sup> |
|--------------------|-----------------------|-----------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|----------------|
|                    |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                |                                                    |                                                                                 |                |
|                    | B16                   | JP 05-047665 (Abstract Only)                                                      | 02/26/1993                     | Fujitsu, Ltd.                                      |                                                                                 |                |
|                    | B17                   | JP 03-286522 (Abstract Only)                                                      | 12/17/1991                     | NEC Corp.                                          |                                                                                 |                |
|                    | B18                   | JP 02-172895 (Abstract Only)                                                      | 07/04/1993                     | NEC Corp                                           |                                                                                 |                |
|                    | B19                   | JP 01-270593 (Abstract Only)                                                      | 10/27/1989                     | Fujitsu, Ltd.                                      |                                                                                 |                |
|                    | B20                   | EP 1 150 345                                                                      | 10/31/2001                     | ASM Japan K.K.                                     |                                                                                 |                |

Examiner

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Substitute for form 1449B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 5

of

5

Application Number

10/784,904

Filing Date

February 23, 2004

First Named Inventor

Ma, et al.

Group Art Unit

Unknown

Examiner Name

Unknown

Attorney Docket Number

AMAT/8830/FEP/PCVD/PJS

Submission Date

March 31, 2004

## NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T <sup>2</sup> |
|--------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|                    | 1                     | Choi, <i>et al.</i> "Stability of TiB <sub>2</sub> as a Diffusion Barrier on Silicon," J. Electrochem. Soc., Vol. 138, No. 10, October 1991                                                                                                                    |                |
|                    | 2                     | Debusschere, <i>et al.</i> "Importance of determining the polysilicon dopant profile during process development," J. Vac. Sci. Technol. B 14(1), Jan/Feb 1996                                                                                                  |                |
|                    | 3                     | Earles, <i>et al.</i> "Nonmelt Laser Annealing of 5-KeV and 1-KeV Boron-Implanted Silicon," IEEE Transactions on Electron Devices, Vol. 49, No. 7, July 2002                                                                                                   |                |
|                    | 4                     | Jeong, <i>et al.</i> "Growth and Characterization of Aluminum Oxide Al <sub>2</sub> O <sub>3</sub> Thin Films by Plasma-assisted Atomic Layer Controlled Deposition," J. Korean Inst. Met. Mater., Vol. 38, No. 10, Oct. 2000                                  |                |
|                    | 5                     | Jeong, <i>et al.</i> "Plasma-assisted Atomic Layer Growth of High-Quality Aluminum Oxide Thin Films," Jpn. J. Appl. Phys. 1, Regul. Pap. Short Notes, Vol. 40, No. 1, Jan 2001                                                                                 |                |
|                    | 6                     | Lee, <i>et al.</i> "Cyclic Technique for the Enhancement of Highly Oriented Diamond Film Growth," Thin Solid Films 303 (1997) 264-269                                                                                                                          |                |
|                    | 7                     | Paranjpe, <i>et al.</i> "Atomic Layer Deposition of AlO <sub>x</sub> for Thin Film Head Gap Applications," J. Electrochem. Soc., Vol. 148, No. 9, Sep. 2001                                                                                                    |                |
|                    | 8                     | Talwar, <i>et al.</i> "Junction sealing using lasers for thermal annealing," Solid State Technology, Vol. 46, Issue 7, July 2003                                                                                                                               |                |
|                    | 9                     | Yamshita, <i>et al.</i> "Kinetics of Boron Activation by Flash Lamp Annealing," Extend Abstracts of the 2003 International Conference of Solid State Devices and Materials, Tokyo, 2003, pp. 742-743                                                           |                |
|                    | 10                    |                                                                                                                                                                                                                                                                |                |
|                    | 11                    |                                                                                                                                                                                                                                                                |                |

Examiner

Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.